

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P453226

Luminaire Tested: **GALN-SA4B-727-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453226  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4B-727-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19185 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

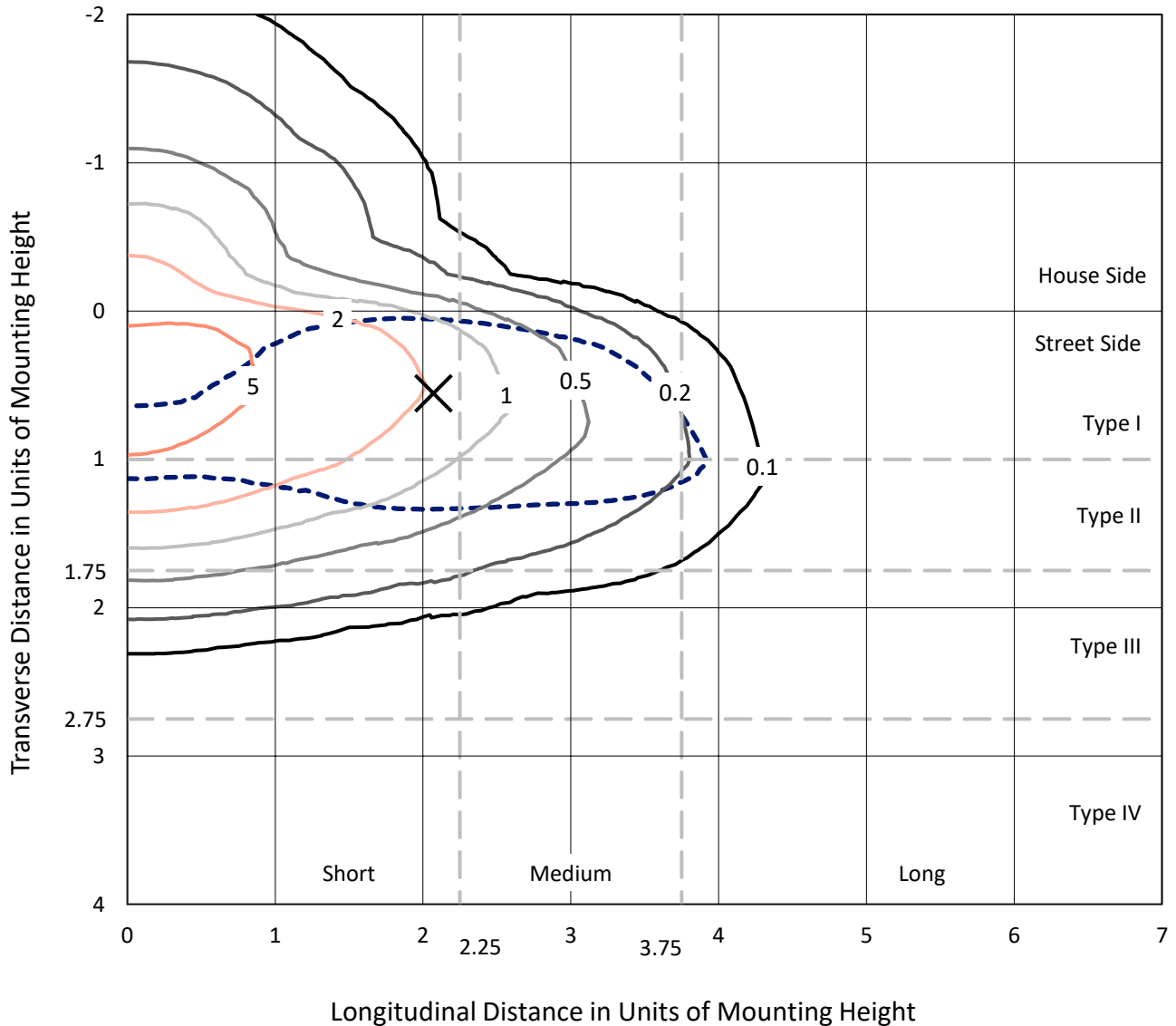
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

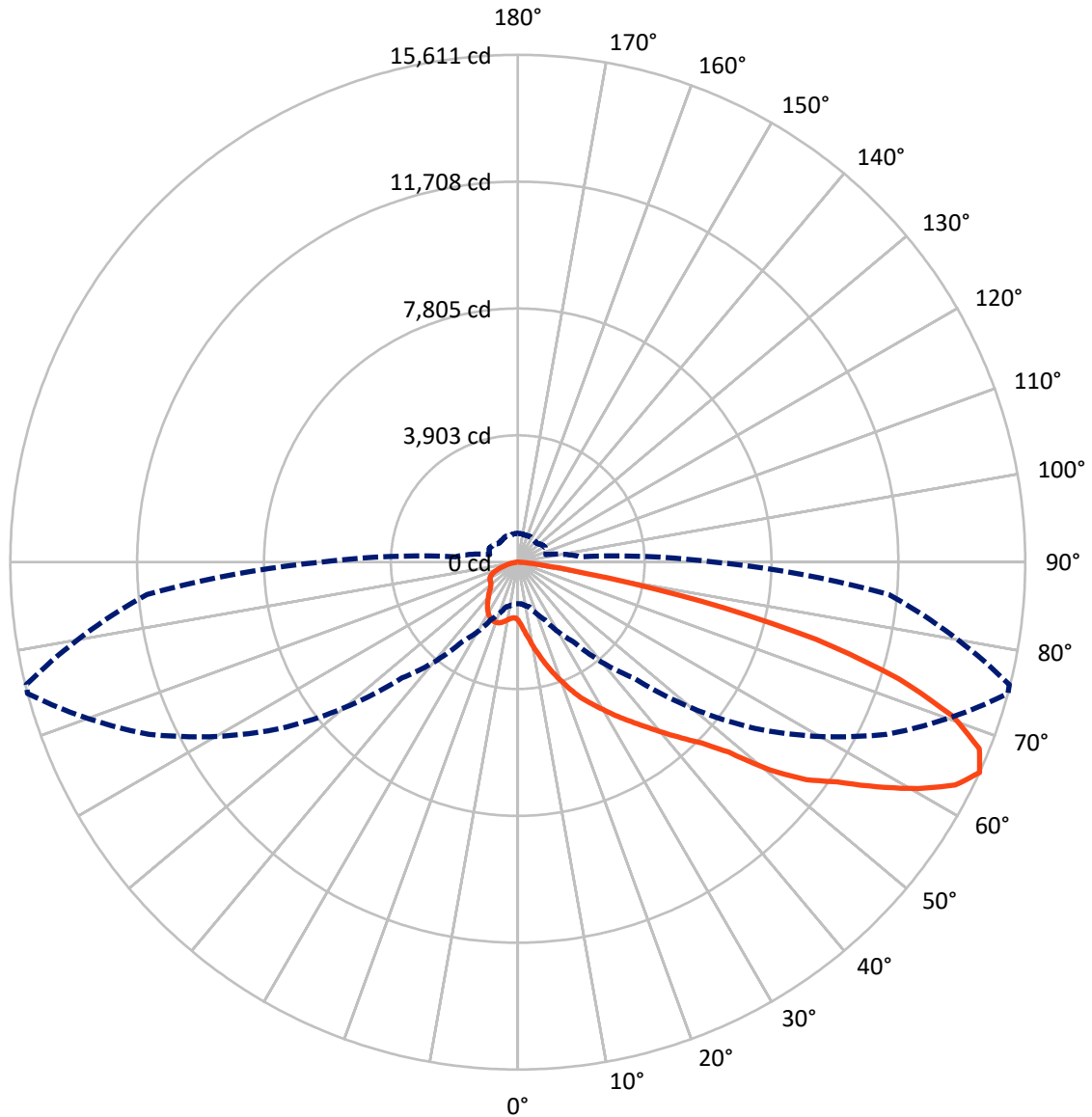
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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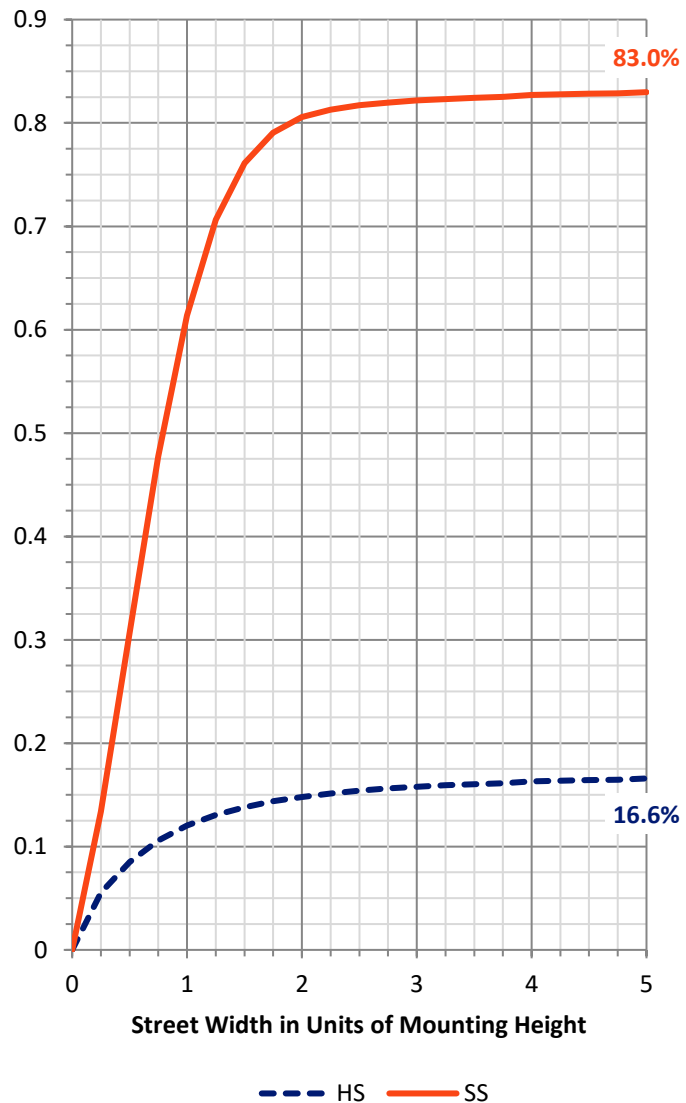
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3225.2	0.0	3225.2
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	15959.7	0.0	15959.7
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	19185.0	0.0	19185.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.6	1.1
10°-20°	848.3	4.4
20°-30°	1638.6	8.5
30°-40°	2661.6	13.9
40°-50°	3661.2	19.1
50°-60°	4322.7	22.5
60°-70°	3787.4	19.7
70°-80°	1808.1	9.4
80°-90°	240.6	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	19185.0	100.0
0°-180°	19185.0	100.0



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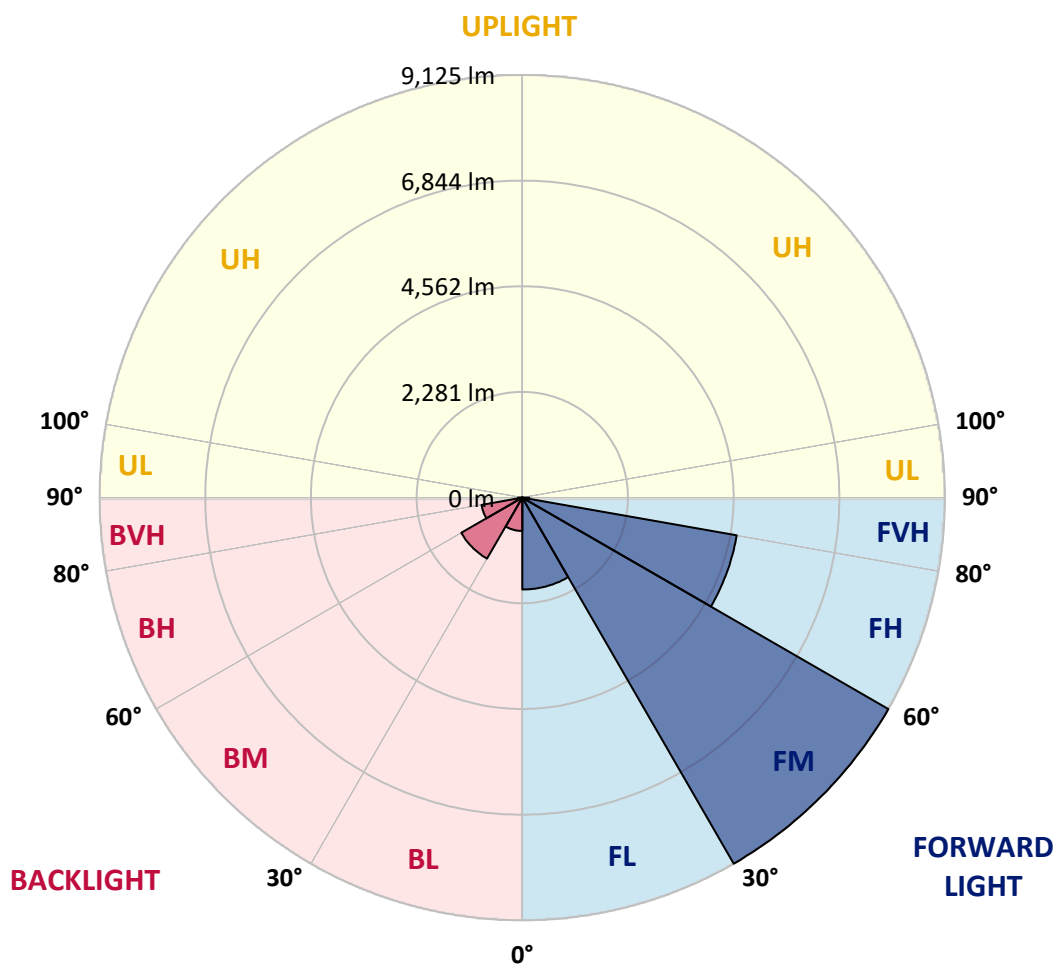
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1983.4	10.3			
FM	(30°-60°)	9124.8	47.6			
FH	(60°-80°)	4701.2	24.5			G2/5000
FVH	(80°-90°)	150.4	0.8			G2/225
BL	(0°-30°)	720.0	3.8	B2/1000		
BM	(30°-60°)	1520.7	7.9	B2/2500		
BH	(60°-80°)	894.3	4.7	B2/1000		G2/1000
BVH	(80°-90°)	90.2	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5
2.5°	2368.4	2352.8	2336.1	2290.3	2241.4	2186.3	2107.2	2031.2	1930.3	1927.2	1852.2
5°	3025.0	3014.6	2940.7	2898.0	2784.6	2633.7	2505.7	2307.0	2122.8	2100.9	1955.3
7.5°	3628.5	3588.0	3559.9	3482.9	3370.5	3176.9	2929.3	2660.8	2352.8	2323.6	2082.2
10°	4083.3	4079.1	4064.5	3997.9	3913.7	3721.1	3446.4	3061.4	2644.1	2586.9	2236.2
12.5°	4423.5	4426.7	4424.6	4423.5	4363.2	4199.8	3902.2	3496.4	2938.6	2898.0	2414.2
15°	4647.3	4678.5	4691.0	4743.0	4748.2	4638.9	4383.0	3916.8	3270.6	3210.2	2605.6
17.5°	4795.0	4810.6	4868.9	4957.4	5029.2	5009.4	4781.5	4306.0	3609.8	3508.9	2804.4
20°	4936.6	4963.6	5008.4	5129.1	5256.0	5314.3	5154.0	4704.5	3945.9	3881.4	3024.0
22.5°	5231.0	5269.5	5285.2	5346.5	5454.8	5557.8	5484.9	5086.4	4314.3	4226.9	3257.0
25°	5729.5	5770.1	5726.4	5711.8	5747.2	5798.2	5782.6	5446.4	4661.8	4537.0	3477.6
27.5°	6378.8	6384.0	6298.7	6217.5	6130.1	6104.1	6056.2	5765.9	4963.6	4859.6	3699.3
30°	7076.0	7051.0	6909.5	6762.8	6615.0	6469.3	6332.0	6073.9	5299.7	5180.1	3916.8
32.5°	7723.3	7709.7	7552.6	7324.7	7075.0	6937.6	6659.8	6385.1	5659.8	5544.3	4140.5
35°	8208.2	8227.9	8055.2	7806.5	7533.9	7412.1	7061.4	6711.8	6032.3	5906.4	4384.0
37.5°	8552.6	8542.2	8389.2	8173.8	7934.5	7828.4	7530.7	7068.7	6432.9	6312.2	4650.4
40°	8675.4	8669.1	8555.7	8398.6	8246.7	8209.2	8021.9	7453.7	6891.8	6750.3	4970.9
42.5°	8597.3	8610.9	8536.0	8493.3	8465.2	8492.2	8509.9	7958.4	7392.3	7262.3	5318.4
45°	8358.0	8350.7	8340.3	8410.0	8568.2	8746.1	8992.8	8435.0	7936.6	7832.5	5784.6
47.5°	7930.3	7982.4	8008.4	8200.9	8546.4	8967.8	9548.4	9073.9	8726.4	8635.8	6495.4
50°	7332.0	7373.6	7527.6	7870.0	8385.1	9051.0	10091.6	10118.7	10043.8	9874.1	7267.5
52.5°	6397.5	6462.1	6779.4	7406.9	8054.2	9016.7	10420.5	11014.6	11113.5	10986.5	8028.1
55°	5351.7	5442.3	5777.3	6600.5	7598.4	8829.4	10647.3	11533.9	11928.3	11810.7	8760.7
57.5°	4327.8	4423.5	4768.0	5565.1	6803.4	8415.2	10796.1	12112.5	13037.5	12884.6	9672.3
60°	3243.5	3343.4	3638.9	4460.0	5671.2	7605.7	10695.2	12614.0	14145.8	14080.2	10584.9
62.5°	2092.6	2202.9	2460.0	3139.5	4359.0	6499.5	10155.1	12890.8	15105.2	15026.1	11250.8
65°	1274.7	1287.2	1428.7	1949.0	2983.4	5032.3	8919.9	12523.5	15610.9	15587.0	11453.8
67.5°	824.1	843.9	908.4	1167.5	1788.8	3495.3	7132.2	11311.2	15315.4	15307.1	11034.4
70°	696.2	702.4	731.5	787.7	1039.5	2119.7	5008.4	9378.8	14192.6	14192.6	10026.1
72.5°	622.3	630.6	641.0	658.7	741.9	1200.8	2988.6	7300.8	12254.0	12335.1	8533.9
75°	565.0	563.0	569.2	572.3	632.7	784.6	1545.3	5399.6	9479.8	9317.4	6180.1
77.5°	483.9	487.0	483.9	497.4	558.8	597.3	784.6	3623.3	5745.1	5534.9	3102.0
80°	397.5	402.7	407.9	416.2	477.6	453.7	471.4	1651.4	2124.9	2080.1	958.4
82.5°	298.6	305.9	314.3	334.0	375.7	299.7	297.6	705.5	766.9	702.4	352.8
85°	120.7	142.6	215.4	235.2	236.2	164.4	183.1	294.5	313.2	305.9	138.4
87.5°	28.1	33.3	69.7	105.1	96.8	61.4	67.6	95.7	109.3	100.9	46.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5	1782.5
2.5°	1817.9	1781.5	1719.1	1671.2	1636.8	1606.7	1587.9	1576.5	1572.3	1571.3	1572.3
5°	1879.3	1814.8	1715.9	1653.5	1619.2	1599.4	1587.9	1586.9	1587.9	1589.0	1585.9
7.5°	1963.6	1871.0	1741.9	1683.7	1657.7	1643.1	1637.9	1635.8	1636.8	1635.8	1635.8
10°	2076.0	1949.0	1792.9	1732.6	1710.7	1694.1	1685.8	1680.6	1676.4	1672.2	1670.1
12.5°	2199.8	2035.4	1848.1	1789.8	1758.6	1732.6	1713.8	1700.3	1691.0	1681.6	1679.5
15°	2338.2	2127.0	1909.5	1828.3	1783.6	1745.1	1712.8	1691.0	1674.3	1660.8	1659.7
17.5°	2470.4	2213.3	1951.1	1846.0	1780.4	1726.3	1683.7	1653.5	1632.7	1615.0	1612.9
20°	2611.9	2295.5	1969.8	1834.6	1749.2	1683.7	1627.5	1591.1	1567.1	1547.4	1544.2
22.5°	2754.4	2365.3	1967.8	1798.1	1695.1	1618.1	1558.8	1520.3	1492.2	1472.4	1465.1
25°	2890.8	2421.5	1941.7	1739.9	1620.2	1540.1	1479.7	1444.3	1419.4	1395.4	1395.4
27.5°	3013.5	2454.7	1892.8	1669.1	1543.2	1458.9	1411.0	1378.8	1355.9	1340.3	1330.9
30°	3134.3	2470.4	1826.2	1579.6	1462.0	1390.2	1351.7	1333.0	1312.2	1294.5	1292.4
32.5°	3242.5	2467.2	1743.0	1492.2	1385.0	1334.0	1318.4	1303.9	1282.0	1257.0	1250.8
35°	3347.6	2446.4	1644.1	1396.5	1320.5	1300.7	1304.9	1284.1	1244.5	1213.3	1208.1
37.5°	3462.0	2409.0	1535.9	1318.4	1266.4	1285.1	1295.5	1249.7	1185.2	1136.3	1124.9
40°	3594.2	2366.3	1423.5	1240.4	1223.7	1270.6	1270.6	1186.3	1097.8	1067.6	1059.3
42.5°	3749.2	2330.9	1329.9	1174.8	1188.4	1235.2	1230.0	1102.0	1065.6	1050.0	1045.8
45°	3994.8	2318.4	1233.1	1117.6	1159.2	1193.6	1150.9	1072.8	1052.0	1039.5	1035.4
47.5°	4383.0	2333.0	1147.8	1074.9	1125.9	1151.9	1062.4	1053.1	1038.5	1020.8	1018.7
50°	4743.0	2319.5	1087.4	1051.0	1096.8	1102.0	1026.0	1029.1	1020.8	1001.0	996.9
52.5°	5037.5	2276.8	1048.9	1038.5	1071.8	1014.6	991.7	1003.1	1000.0	975.0	970.9
55°	5361.1	2250.8	1030.2	1038.5	1055.2	938.6	959.4	976.1	971.9	954.2	953.2
57.5°	5753.4	2256.0	1016.7	1041.6	1038.5	900.1	927.2	946.9	945.9	940.7	940.7
60°	6155.1	2258.1	995.8	1040.6	1018.7	869.9	893.9	922.0	924.0	927.2	927.2
62.5°	6288.3	2167.5	955.3	1021.9	975.0	840.8	862.6	901.1	899.1	907.4	908.4
65°	6039.6	1916.8	894.9	979.2	918.8	820.0	838.7	874.1	862.6	884.5	888.7
67.5°	5497.4	1585.9	801.3	902.2	856.4	798.1	823.1	836.6	815.8	858.5	859.5
70°	4751.3	1238.3	682.6	792.9	785.6	775.2	810.6	789.8	760.7	812.7	802.3
72.5°	3973.0	945.9	545.3	648.3	691.0	740.9	788.8	729.5	688.9	704.5	685.7
75°	2984.4	699.3	438.1	507.8	575.4	692.0	769.0	656.6	594.2	579.6	575.4
77.5°	1521.3	456.8	327.8	379.8	431.8	625.4	741.9	571.3	492.2	469.3	458.9
80°	543.2	284.1	231.0	262.2	291.4	538.0	648.3	472.4	381.9	377.7	381.9
82.5°	251.8	183.1	155.0	171.7	172.7	359.0	494.3	352.8	290.3	441.2	372.5
85°	108.2	91.6	87.4	85.3	79.1	160.3	277.8	189.4	295.5	132.2	121.7
87.5°	32.3	36.4	32.3	23.9	17.7	17.7	28.1	10.4	7.3	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)